
Amendments to the Specification:

Please add the following new paragraph after line 4 on page 5:

The sorbent material comprises a chemical substance selected from the group consisting of a first composition in which a species A has a prevalence of about half that of a species B, and a species X has a prevalence of about four times that of the species A wherein for either composition A and B are metal species and X is selected from the group consisting of oxygen and sulfur. The sorbent material comprises a chemical substance having the first composition, and A is selected from the group consisting of Co^{2+} , Cu^{2+} , Fe^{2+} , Mg^{2+} , Mn^{2+} , Ni^{2+} , Zn^{2+} , and combinations thereof, and B is selected from the group consisting of Al^{3+} , Bi^{3+} , Co^{3+} , Cr^{3+} , Fe^{3+} , Mn^{3+} , Ni^{3+} , V^{3+} and combinations thereof.